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The Effects of Cross-Ownership on the Local Content and Political Slant of Local Television News

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Abstract: I examine the effects of newspaper cross-ownership on the local content and political slant of local television news. Late evening local news broadcasts were recorded for three nights during the week prior to the 2006 general election for every cross-owned station and for other major network-affiliated stations in the same markets. I estimate the within-market effects of newspaper (and radio) cross-ownership, while also controlling for other station attributes. This analysis reveals that local television newscasts for cross-owned stations contain on average about 1-2 minutes more news coverage overall, or 4%-8% more than the average for non-cross-owned stations. Newspaper cross-ownership is also significantly and positively associated with both local news coverage and local political news coverage. Cross-owned stations show 7%-10% more local news than do non-cross-owned stations (regardless of whether sports and weather segments are included in this comparison); further, on average, cross-owned stations broadcast about 25% more coverage of state and local politics. Newspaper cross-ownership is also associated with more candidate coverage, more candidate speaking time and more coverage of opinion polls, although these effects are not precisely estimated. With regard to the partisan slant of news coverage, there is little consistent and significant difference between cross-owned stations and other major network-affiliated stations in the same market; although there is some evidence that the partisan slant of local news in each market is associated with the average partisan voting preferences in the local market.

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1. Introduction

This study examines whether cross-ownership of a newspaper and television station influences the content or slant of local television news broadcasts.² There are 29 such cross-owned television stations located in 27 different markets in the U.S. (see Table 1).³ I compare the local news broadcasts for these cross-owned stations to those of their major network-affiliated competitors in the same market. In particular, 312 late evening local newscasts were recorded from a total of 104 stations during the week prior to the November 2006 election; these recordings were then coded and analyzed for local news content and political slant.

No previous study has examined the local news content and slant of every cross-owned station, making this the most comprehensive analysis of the effects of cross-ownership to date. Further, the within-market approach of this study has the advantage that it allows identification of the effect of cross-ownership even in the presence of otherwise confounding unobservable market characteristics, such as the newsworthiness of current events or consumers' preference for local and political news. Thus the statistical methods employed here represent a significant improvement over other recent empirical work (e.g., Yan 2006).

So how might cross-ownership affect local television news coverage? Popular accounts focus on the presumed detrimental impact of cross-ownership on local content; however, in theory, the effect of cross-ownership on local news content is ambiguous. Cross-ownership of newspapers and/or radio stations may allow owners to exploit economies of scale or scope, in turn enhancing their market power. To the extent that competition pushes stations to devote

² In general, "cross-ownership" refers to common corporate ownership of multiple media outlets (e.g., newspaper, radio, and\or television) within the same market area. However, for ease of exposition, throughout this article, the default meaning of "cross-ownership" will be within market newspaper\television combinations, while the term "cross-owned radio" will be employed to refer to within market radio\television combinations.

³ Source: Federal Communications Commission.

resources to the production of more high quality local news programs (i.e., without slant), crossownership may then instead lead to a reduction in the quantity and quality of local coverage. On
the other hand, economies of scale from cross-ownership may apply only to local news reporting,
in which case cross-ownership might very well lead to more high quality local news
programming (e.g., Project for Excellence in Journalism 2003). In addition, the existence of a
partisan slant in news coverage may not only arise from slack in profit-maximizing behavior on
the part of firms with market power; partisan slant may also be a dimension along which firms
locate in order to gain larger audiences. Consequently, if viewers possess a sufficient taste for
opinion, increased competition may lead to an increase in slanted coverage as a means of product
differentiation (e.g., Anand et al. forthcoming).

The question of whether and how cross-ownership (of newspapers, radio stations or both) impacts local television news is therefore an empirical one. Accordingly, I briefly review some the recent and relevant empirical literature; I then describe my data, methods and results.

Recent Studies of Localism in Television News

Several recent studies have examined the effect of cross-ownership on local content in television news, but none of these address the relationship between cross-ownership and localism in a satisfactory manner. In part, this is because the data employed in these studies was not collected for the purpose of testing the effects of cross-ownership.

For example, the Project for Excellence in Journalism (2003) reports that cross-ownership is associated with higher quality local news; this report is based upon a five year study of 23,000 news stories from 172 stations in 50 different markets, although of these, only six stations are cross-owned. Each station in this study received a grade based upon a subjective quality scale that combined separate scores for localism, importance, sourcing, creativeness and

balance and accuracy. However, the Pew study then simply compares the grade distribution for cross-owned and non-cross-owned stations, with no attempt to control for other determinants of quality. Of the six cross-owned stations examined, the Pew study reports that "36%" (sic) received an "A" grade and 0% received an "F" grade; for the non-cross-owned stations, only 14% received "A" grades and 8% received "F" grades. However, the absence of within-market comparisons or any other controls renders this study uninformative about the effects of cross-ownership on local news quality.

In contrast, a recent study by Yan (2006) does examine a large number of cross-owned stations; however, this study falls short in its statistical methods. Yan compares the local and public affairs content of more than 200 stations (including every cross-owned station) for several days in 2003 (two "constructed" weeks). First, Yan estimates the probability that a station airs any local news or public affairs programs, controlling for several ownership, network and market characteristics. Cross-owned stations are significantly more likely to air any local news, but are no more likely to air public affairs programs. Yan then estimates a two-stage model of the amount of time devoted to local news programming (or public affairs); he finds no difference between the programming of cross-owned and other stations. However, identification of this model is predicated on the dubious assumption that market characteristics, such as the percent of population that is white, determine *whether* a station airs local news (or public affairs), but not *how much* local news (or public affairs) the station airs.

Apart from the nonsensical modeling assumptions, Yan also fails to control for market fixed effects. This is disconcerting, since determinants of the presence and amount of local news, such as consumers' tastes and preferences for local news, or the incidence of local newsworthy events, are therefore omitted variables that may well confound the estimate of cross-

ownership effects. For this reason, within-market comparisons are desirable in order to avoid what might otherwise be spurious correlation between the included variables and important market-specific unobservable phenomena. In fact, Yan does not control for any demographic differences across markets in his analysis of the amount of local news or public affairs programming. This is odd, given that elsewhere Yan states:

Local media markets in the U.S. differ dramatically across a number of characteristics, including the size of the market..., and the viewing behavior and demographic makeup of the potential audience. These market characteristics may impact the extent to which individual broadcast stations offer news and public affairs programming, ... (p. 5; Yan and Napoli, forthcoming).

For these reasons then, the study by Yan is likewise uninformative about the effects of cross-ownership on local news.

In contrast to Yan (2006), both Alexander and Brown (2004) and Adilov et al. (2006) estimate the within-market effects of various ownership attributes using a cross-sectional dataset on local news content in 20 DMA's during several days in 1998.⁴ However, the sample examined by these authors includes only one DMA with a cross-owned newspaper, so neither study examines the effects of newspaper cross-ownership. In addition, both of these studies treat different news broadcasts by a particular station as independent observations, rather than adjusting their standard errors for clustering within station. In general, this may have the effect of exaggerating the precision of estimated coefficients on variables that do not vary within station, such as ownership attributes. Consequently, in my empirical analysis below, I include

⁴ These studies both examine data from the same archive of news segments maintained at the University of Delaware (http://www.localtvnews.org/index.jsp). However, I was unable to obtain the same permission to use this data; for this reason, I do not examine this data source in my analysis of the determinants of localism.

controls for market-specific unobserved effects and I adjust standard errors for the clustering of observations within stations.

Finally, previous studies of local content ignore sports and weather (e.g. Alexander and Brown 2004 and Adilov et al. 2006); this is odd since many consumers likely choose to watch local news programs based in large part upon sports and weather coverage. For this reason, I include sports and weather in my preferred definition of local news; however, for the sake of consistency with past practice, I also analyze local content excluding sports and weather.

Recent Studies of Political Slant in News Coverage

In contrast to the literature on localism, few studies analyze the political slant of local news. The primary exceptions of interest are by Pritchard (2001, 2002). Pritchard employs a case study approach to analyze whether cross-owned newspapers and television stations exhibit a similar slant in their respective coverage of the 2000 Presidential election. However, case studies are not a substitute for more systematic empirical analyses based on large samples that also control for the confounding influence of other covariates. Nevertheless, the approach used by Pritchard, which considers the effect of newspaper slant on cross-owned television slant is echoed in the final set of regressions that I estimate in this study.

Media bias is, of course, a perennial topic of popular and heated debate, albeit one not renowned for its objectivity or intellectual rigor (e.g., Alterman 2003 and Coulter 2002). However, the production of more systematic evidence on media bias by journalism and communications scholars has been hampered by limited data, simplistic statistical methods and a tendency to employ subjective measures of partisan slant (e.g., D'Alessio and Allen 2000). In contrast, several recent empirical studies by social scientists have introduced novel empirical

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⁵ The particular measure of slant employed by Pritchard is a subjective evaluation of how a news report would influence a hypothetical undecided voter.

strategies and advanced statistical methods to the study of media bias, with a particular emphasis on developing and analyzing more objective measures of partisan slant (e.g., Gentzkow and Shapiro 2006a,b; and Groseclose and Milyo 2005).⁶ However, this recent social scientific scholarship has focused on either national media outlets or newspapers, but not local television.

The relatively scant attention to partisan bias in local television news coverage is no doubt attributable in large part to the absence of readily accessible and comprehensive archives of local news broadcasts, in contrast to archived transcripts of national news programs and newspapers which can be easily accessed through many university libraries. For this reason, in cooperation with the Federal Communication Commission (FCC), I have collected a video archive of major network affiliates in every market with a cross-owned newspaper\television pair. The late evening newscast was obtained for each station on the same three days during the week prior to the November 2006 general election. These recordings were then coded for both local news content and political slant, using measures similar to those employed in several recent studies.⁷

In addition, because this dataset was collected for the express purpose of investigating the effects of cross-ownership, both cross-owned and non-cross-owned stations were included in every market with an instance of cross-ownership. This structure can be exploited to control for unobserved market-specific effects that might otherwise be spuriously correlated with cross-ownership. Consequently, the dataset analyzed in this study is not only current, but particularly

⁶ For a recent review of the emerging social science literature on media bias, see Milyo and Groseclose (2006); two noteworthy studies of the consequences of media bias on voting behavior are Della Vigna and Kaplan (forthcoming) and Gerber, Karlan and Bergan (2006).

⁷ For example, Alexander and Brown (2004) with respect to local news content, and Gentzkow and Shapiro (2006a,b) with respect to political slant.

well-suited to identifying the effects of cross-ownership on the political slant of local news coverage.

As noted above, traditional scholarship on media bias relies on highly subjective measures of whether particular news segments are balanced or not; there are numerous reasons to be dubious of such measures, not least of which is the inherent challenge that subjective procedures pose for replication (which is a hallmark of scientific inquiry). A handful of recent studies by economists and political scientists attempt to measure the extent and direction of media bias using measures of partisan slant that are objective and replicable. For example, Groseclose and Milyo (2005) base their study upon the tendency for both media outlets and members of Congress to cite outside experts; this allows the authors to estimate ideological ratings for several national media outlets anchored by well-known ideological ratings of members of Congress. In two recent studies Gentzkow and Shapiro (2006a,b) use the difference in speaking time for political candidates in local television newscasts and the tendency for local newspapers to use phrases favored by politicians of one party or the other as their gauges of what constitutes partisan bias. All three of these studies stand out for the attempt by the authors to construct arms-length and replicable proxies for measuring partisan slant.

In the subsequent empirical analysis, I follow Gentzkow and Shapiro in using speaking time of candidates as one metric for partisan slant. I also use several measures that are very similar in spirit to those employed by Gentzkow and Shapiro; in particular, time devoted to all candidate coverage, time devoted to issues favored by one party or the other, and time devoted to polls favoring one party or the other. Consequently, like Gentzkow and Shapiro, I employ measures of partisan slant that cannot be used to determine whether a news report is biased relative to some center point or objective baseline; instead, the subsequent empirical analysis can

only estimate whether a particular station is to the left or right of its within-market competitors, based upon these measures and the time period examined.⁸

2. Data

I conceived and implemented the design of this study, although the FCC obtained and provided most of the data necessary for this research. The absence of a comprehensive archive of local television news program necessitated the collection of primary data on the content and slant of local news programs. Nearly all of the more than 300 recordings of local newscasts used in this study were obtained from the Video Monitoring Service (VMS). In a few instances, recordings were obtained directly from the television station in question.

Time and resource limitations required that some tradeoffs be made in the number of stations versus the number of broadcasts recorded for this study. However, because the primary analytical method to be employed in this study is the within-market comparison of news content across stations, recordings were made for multiple stations in every DMA with a cross-owned station, but for only three days during the week prior to the 2006 general elections on Tuesday, November 7th. ¹⁰

The three days examined are the Wednesday, Friday and Monday immediately prior to Election Day in 2006 (i.e., November 1st, 3rd, and 6th). By focusing on these days, I expect to observe local news content during a particularly focal and salient time period; in addition, the widespread coverage of the elections during this week provides several means to quantify

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⁸ This is in contrast to the primary contribution in Groseclose and Milyo (2005), which was the creation of a measure of media bias that could be compared to some centrist baseline. Groseclose and Milyo define the ideological ranking associated with the median voter to be the center, and measure the distance of various prominent national media outlets form this center.

⁹ For more information about VMS, see: http://www.vmsinfo.com/ (viewed March 1st, 2007).

¹⁰ In addition, consecutive broadcasts from the same station may not be independent observations; for this reason, in all subsequent regression models, I correct standard errors for this source of grouping (i.e., clustering) among observations.

political slant in a manner that is both relatively objective and otherwise not available for other points in time.

This approach departs from the more common practice in content analysis, which is to examine a "constructed week" (e.g., Monday of one week, Tuesday from another, and so on) in order to minimize the influence of any particular news event that might dominate the news in a given week. However, the goal of this study is precisely to focus on a particular news event: the 2006 general elections. Of course, Election Day will not have the same importance in every market, since not every DMA experiences a Senate or Gubernatorial race, and not all races are equally interesting or newsworthy. This is the motivation for analyzing the effects of crossownership within markets, in order to control for these considerations, as well as all manner of other market-specific phenomena (i.e., market concentration, local tastes for political news, the occurrence of competing news events, etc.).

Nevertheless, an important caveat to keep in mind is that the behavior of local news stations may not be the same during the week just prior to the general elections compared to other times of the year. For example, the temptation and means to slant the news may be particular abundant during this period. On the other hand, the viewing public may be particularly sensitized to any slant in election coverage, which in turn may serve to deter such behavior. Consequently, the findings of this study may not be representative of differences in local news coverage by cross-ownership throughout the rest of the year. Even so, this study does investigate the presence and extent of such differences during a particularly important period, when local and unbiased news content should be especially valuable and salient for the viewing audience.

The full list of television stations and markets included in this study are described in Table 1. I obtained recordings of late evening news casts on the previously specified dates for every cross-owned station in the U.S. I also attempted to obtain recordings of the late evening newscast for the four major network affiliates (ABC, CBS, NBC, FOX) in each of the 27 DMAs with a cross-owned station, as well as for CW network affiliates in those markets that are both in the top-35 DMAs and include a cross-owned station (again, this limitation was due to resource constraints). However, not all of these networks are represented in every market in my dataset, either because there is no such local network affiliate, or because the local affiliate does not broadcast a late evening news program in a 30-minute or longer time slot. I was able to obtain recordings of newscasts from each station for the same three nights described above. Therefore in all, these selection rules yielded a total of 312 newscasts from 104 different stations; of these, 87 newscasts come from the 29 currently existing cross-owned stations.

I received the video recordings from VMS over a period of several weeks beginning in late November 2006. Each of these recordings was reviewed independently by two different coders for content and slant. In all, 17 different research assistants contributed to the coding of these broadcasts, although every broadcast was coded by at least one graduate student in the Truman School of Public Affairs at the University of Missouri in Columbia, Missouri. The coding process gleaned two types of information: i) the time spent on local versus non-local news, without consideration of slant, and ii) several specific measures of different types of political coverage and slant. However, time and cost considerations did not allow for both types of data to be recorded independently by two coders. Only those measures associated with the political coverage and slant of the news were coded twice. 11

¹¹ This choice was made in consideration of the fact that the classification and timing of local versus non-local news segments requires fewer subjective judgments than the classification and timing of the political coverage and slant

The set of coders that collected information on local content timed the length of each news segment (not including commercials, swirling graphics, anchor biographies, or idle banter) and determined whether each segment was devoted to local or non-local news. ¹² Each segment also received a descriptor (e.g., "parade downtown") and was further classified as local or non-local politics, other local or non-local news, sports, or weather.

Two sets of coders independently viewed and recorded the amount and slant of political coverage slant; these are measured by the amount of speaking time allotted to candidates for office, the time allotted to covering candidates and their campaigns, and the time allotted to covering opinion polls favorable to one party or another. In addition, coders were instructed to record the time devoted to specific "partisan issues" in each newscast. I compared both sets of these coded data side-by-side in order to resolve any non-trivial discrepancies or oversights; in some cases this involved watching the original broadcasts for a third time.

The "partisan issue" list was compiled by viewing the websites of each major party and each major party candidate for state governor or U.S. Senate in every state intersecting any of the DMA's listed in Table 1. These websites were viewed three times during the week prior to the general election. Any issue or event that appeared repeatedly and prominently on the websites of one party, but not the other was classified as a "partisan issue." For example, only Democratic websites trumpeted press releases or announcements about Republican Congressman Mark Foley and his involvement in the most recent U.S. House page scandal, while only Republican websites similarly featured Democratic Senator John Kerry and his "botched joke" about U.S. soldiers in

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of news segments. Thus it was more important to have redundant coding for the latter measures. However, for a subset of broadcasts I did arrange for redundant coding of every measure employed in this study; as expected, there were not substantive differences in coding of local versus non-local content.

¹² "Local news" includes any coverage of events in the same state; for DMA's which cross or abut state borders, coverage of the neighboring state is considered "local."

Iraq. In addition to specific events, several partisan issues fell neatly into broad categories, such as complaints about the ethics or negative advertisements of members of the other party. In fact, the press releases and featured events on these party websites were so bifurcated that it was a fairly straightforward exercise to construct the partisan issue list (see Table A1 for more details).

The purpose of this partisan issue list is to characterize the kinds of events that only one party broadcasts when party members have control over what news to disseminate, as is the case with party-affiliated websites. So to the extent that local news stations choose to cover these "Democratic issues" or "Republican issues", this is one way to define whether a particular news segment has a Democratic or Republican slant. However, I make no attempt to characterize whether such coverage is even-handed or not, as that would require a great deal more subjective analysis.

The advantage of the partisan issue coverage measure described here, as well as the other three measures described above, is that they are constructed in an arms-length manner; I did not decide which issues favored either party, instead these classifications are based solely on what each party chooses to disseminate to the public via websites. Further, the time spent on partisan issues is measured in a manner that should not be sensitive to the political ideology of the coders or the investigator. Consequently, this procedure can be replicated by other researchers, either for the purpose of checking my analysis, or for comparing these findings to those from future election periods.

Consistent with the claim above, the inter-coder reliability between the two sets of coders that I employed is quite high, not only for the partisan issue variable, but for all of the measures of partisan slant. Because the primary data recorded for this study is continuous (time in seconds), an appropriate measure of reliability is simply the correlation between the times

recorded by each coder. For all of the dependent variables measuring partisan slant that are examined in this report, the coefficient of correlation between coders is between .95 and .99. Not surprisingly then, the findings reported here are nearly identical whether based upon the data recorded by the first or second coder. Therefore, for simplicity, and to further reduce any idiosyncratic error, all findings pertaining to partisan slant of news coverage are based upon the average times recorded by each coder for each measure.

In addition to information on the cross-ownership status of each station, I also collected data on a variety of station attributes (e.g., network affiliation, parent company, etc.) from several public sources, including the FCC, *BIA Financial Network*, *Nielson Media Research*, *SRDS TV & Cable Source* (Standard Rate and Data Service), and the *Television and Cable Factbook* (Warren Communication). Descriptive statistics for station attributes by cross-ownership status are listed in Table A2.

In order to gauge the political orientation of station owners, I recorded editorial endorsements of presidential candidates by cross-owned newspapers from the web archives of *Editor and Publisher*.¹³ To this end, I also recorded the dollar amount of political campaign contributions to federal candidates and national parties made by persons in the employ of the parent company of each television station in my dataset; these data were collected from the websearchable database administered by Citizens for Responsive Politics.¹⁴

3. Methods

As noted above, the dataset analyzed in this report was constructed so as to permit within-market comparisons. However, because in nearly every case multiple control stations

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¹³ http://www.editorandpublisher.com/eandp/article brief/eandp/1/1000707329; last viewed March 8, 2007.

¹⁴ www.crp.org; last viewed March 10, 2007.

exist, and because these controls all have different network affiliations, I do not analyze matched pairs of stations. Instead, I exploit all of the available information in the data by conducting a multiple regression analysis with controls for unobserved fixed effects in each market; in addition, because station broadcasts across days are not necessarily independent observations, I correct all standard errors for clustering at the station level. Finally, in order to check the sensitivity of results, I also examine several alternative model specifications.

For each dependent variable in the analysis, I first present descriptive statistics by crossowned and non-cross-ownership status. Next I present a set of ordinary least squares (OLS) regression results using various model specifications; however, because the theoretical effects of cross-ownership on economies of scale or scope apply to newspaper cross-ownership and\or radio cross-ownership, I examine all of these cross-ownership regimes. In addition, every model specification includes controls for market and date fixed effects. I also present models that include controls for the size of the parent company of each station (measured by percent of U.S. households covered by all stations owned by the parent company), network ownership and affiliation, and in some cases, the time slot for each broadcast. Parent company coverage is included as proxy for the potential effects of economies of scale for large corporate owners. Network owned and operated stations likewise may enjoy certain economies from this particular form of integration. Network affiliations are included to evaluate popular claims about behavioral differences among networks. However, several of the control variables are correlated with each other, so care should be taken in interpreting the estimated coefficients on these control variables.

As noted above, I present model estimates with and without controls for broadcast time and length. One reason to include these controls is that the amount of time devoted to covering

local events or local politics is likely to be greater in a one hour versus a half-hour broadcast. On the other hand, the time slot for the local news is a choice on the part of the local station, so it may reflect station-level preferences for local content and slant. In that case, time slot choices should not be included in the controls. Given these conflicting arguments, I estimate models with and without indicators for the news broadcast start time and an indicator for whether the news program is one hour in length or 30 minutes in length.

The purpose for market fixed effects in these models is to "sweep out" idiosyncratic market-specific phenomena from the regression. These market-specific effects include the characteristics of viewers, the competitive environment of the DMA, and the like. I have also examined model specifications that control for (market X date) fixed effects; however, this alternative specification does not yield any appreciable differences in the estimates of interest. Consequently, for ease of exposition, I present only estimates from regression models that include separate fixed effects for market and date.

Throughout this report, I focus on a handful of focal characteristics of ownership: i) cross-ownership of a newspaper and\or radio, ii) the size of the parent company, and iii) network ownership or affiliation. However, I also examine whether the political orientation of the cross-owned newspaper influences the observed effect of cross-ownership on partisan slant in news coverage. I accomplish this by noting whether the cross-owned newspaper endorsed either Bush or Kerry in the 2004 presidential elections, then creating an indicator that takes the values of 1, 0, and -1 according to whether the paper endorsed Kerry, neither candidate (or split), or Bush. I also employ a second proxy for the political orientation of station owners based upon the difference in campaign contributions to the major parties and their candidates. By including

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 $^{^{15}}$ I am unable to separately identify and control for ownership fixed effects, due to co-linearity with market fixed effects.

these proxies as controls for the political orientation of station owners in the subsequent regression analyses of the determinants of slant, I am able to test whether the political orientation of ownership has much effect on the slant of local news, or in any way modifies the effects of cross-ownership on the slant of local news.

4. Results: Local Content

I examine four measures of news content i) the total news coverage, ii) local news coverage including sports and weather segments, iii) local news coverage excluding sports and weather segments, and iv) state and local political coverage. All of these categories are measured in seconds of airtime. Table 2 describes the mean values for these variables by crossownership status. For example, local stations broadcast approximately 26 minutes of total news coverage, with about 80% of this time devoted to local stories. However, a fair amount of local news is devoted to sports and weather. Local news, excluding sports and weather, accounts for a little less than half (46%) of the total news time. Finally, state and local political coverage averages just about three minutes per newscast for the dates under study.

Cross-owned stations devote about 21 seconds more time to news coverage overall, with most of that difference coming from state and local political news. Cross-owned stations provide more local content than non-cross-owned stations by each measure described above; however, these differences are not statistically different from zero at conventional significance levels (p<.10, or better).

Of course, a variety of factors may determine local content, not least of which is the newsworthiness of local events in each market. In addition, cross-owned stations differ from non-cross-owned stations in several potentially important attributes. For example, cross-owned stations have smaller corporate owners (by household coverage), are less likely to be network

owned and operated and are less likely to be affiliated with the Fox network (see Table A2 in the appendix). For this reason, I examine the effects of cross-ownership on local content in an ordinary least squares regression, in order to control for the influence of other relevant determinants of localism that may be spuriously correlated with cross-ownership. The results of this exercise are reported below.

Table 3 describes the association between cross-ownership and total news coverage for several model specifications; the format of the presentation in this table mirrors that in most subsequent tables. The first two columns (1-2) report coefficient estimates of interest for models that include only cross-ownership variables in addition to market and date fixed effects. The next two columns (3-4) add controls for other stations characteristics; in particular, ownership and network affiliation. The final column (5) also includes an indicator for whether the local newscast is regularly schedule in a 60-minute time slot versus 30-minutes, as well as indicators for whether the regularly scheduled starting time for the local late evening is in the nine o'clock hour, the ten o'clock hour or the eleven o'clock hour (all times are local). These last two full models, (4) and (5), are my preferred models as they include relevant controls for other confounding influences, as opposed to the more sparse models, (1-3). For this reason, throughout this report, I will focus on estimates obtained from regression analysis of the full models. However, since Table 3 is the first of several tables with the same layout, I will walk through the results column by column in this one case.

Looking at the first column of Table 3, stations with cross-owned newspapers provide 35 seconds more news than non-cross-owned stations within the same market, although this difference is not statistically significant. However, as the next two columns (2-3) indicate, radio cross-ownership is associated with significantly less news coverage, about six or seven minutes

less. Also of note in column (3), increased household coverage by the parent company increases the time devoted to news content by 22 seconds per percentage point of household coverage. However, as noted above, the coefficients on these control variables should be interpreted with care, since parent company coverage is highly correlated with network ownership. For this reason, I will focus primarily on the estimated coefficients of interest for cross-ownership in discussing the results presented in subsequent tables.

The addition of controls for network affiliation (column 4) mitigates the effects of radio cross-ownership and parent company household coverage, but the estimated effect of cross-ownership increases to 99 seconds for stations that do not also own a radio station, and about 217 seconds for stations that do own a radio station (since 99.1 + 117.4 = 216.5). Notice that the *differential effect* of newspaper-radio-television ownership (versus radio-television ownership) is just 117 seconds, but the *total effect* of newspaper-radio-television ownership (versus no-cross-ownership) is the sum of this differential and the newspaper cross-ownership effect (i.e., 99.1 + 117.4 = 216.5). Further, while the individual estimates for newspaper cross-ownership are not individually statistically significant, these estimates are jointly significant (p<.05). Consequently, in model 4, newspaper cross-ownership is significantly and positively associated with total news coverage.

Another way to interpret the effect of newspaper cross-ownership is based on the average marginal effect, or what I will call the *average effect*; this is calculated by summing the estimate on newspaper cross-ownership and the differential effect of newspaper-radio cross-ownership weighted by the fraction of all television stations that also own radio stations. In other words, the average effect of newspaper cross-ownership is the estimated effect evaluated at the mean value of radio cross-ownership, which is .20 for the full sample. Therefore, the average effect of

newspaper cross-ownership in specification 4 is about 123 seconds more total news time (i.e., $99.1 + (117.4 \times .20) = 122.58$).

Finally, because the differential effect of both newspaper and radio cross-ownership is not statistically significant, it is also reasonable to interpret the effect of newspaper cross-ownership by omitting the differential effect from the model and estimating a pooled model with only a common newspaper cross-ownership variable effect. I report this *pooled effect* of newspaper cross-ownership in Table A3 of the appendix; not surprisingly, the pooled effect of newspaper cross-ownership on total news coverage is also significant and positive.

Throughout this report, I will use this terminology to distinguish between the total effects of newspaper cross-ownership on stations with and without radio stations, the differential effect of newspaper cross-ownership on those television stations with cross-owned radio stations, as well as the average and pooled effects of newspaper cross-ownership for the full sample. However, it is important not to get lost in the nomenclature here; the upshot of all this is that newspaper cross-ownership is associated with about a two-minute average increase in total news coverage, or about 8% more total news than for non-cross-owned stations.

Returning to specification 4 in Table 3, notice that some network affiliations are associated with much less news content; however, these effects are (not surprisingly), attributable to the choice of time slot and the length of broadcast (i.e., 60 minutes versus 30 minutes). In column 5, I report regression results for a model that includes indicators for these time slot effects; in this specification, the only significant estimate is that for newspaper cross-ownership (the average effect is 58 seconds). So depending on whether one prefers the regression model in column (5) or (4), newspaper cross-ownership is associated with about a one

to two minute increase in total news coverage (or 4%-8% more than the average time for non-cross-owned stations).

In Tables 4 and 5, I repeat the same analysis as described above, but with two different definitions of local news. In Table 4, I examine the determinants of all local news, including sports and weather; in Table 5, I examine the determinants of local news excluding sports and weather. I include the latter definition of localism only because some prominent media studies ignore sports and weather when analyzing local content; however, an appropriate definition of local news should include these types of segments.

The results presented in Table 4 for the preferred regression models (columns 4 and 5) show that cross-ownership is consistently associated with increased local content for stations regardless of radio cross-ownership. Further, in both models, the two newspaper cross-ownership variables (including "both radio and newspaper") are jointly significant (p<.01 in specification 4, and p<.05 in specification 5). For this more inclusive definition of local news, the average effect of newspaper cross-ownership is 120 seconds and 83 seconds for models 4 and 5, respectively, while the pooled effect is 131 seconds and 85, respectively (see Table A3). Therefore, newspaper cross-ownership is associated with around 1.5 to 2 minutes more local news coverage (including sports and weather), or about 7%-10% more than the average for non-cross-owned stations.

The pattern of results in Table 5, using the definition of local news that excludes sports and weather, is similar, except that the positive association between cross-ownership and local content is largely mitigated for non-radio cross-owned stations, but larger for radio-cross-owned stations. However, the two newspaper cross-ownership variables are jointly significant at p<.01 in both models 4 and 5, with the average effect of newspaper cross-ownership being 77 seconds

and 55 seconds, respectively. The pooled effect of newspaper cross-ownership on this more narrow definition of local news is 97 seconds and 70 seconds for models 4 and 5, respectively (see Table A3). Therefore, newspaper cross-ownership is significantly and positively associated with local news coverage (excluding sports and weather); the average effect is around one minute, or 8%-10% of the average local news coverage (excluding sports and weather) of non-cross-owned stations.

The final measure of local versus non-local content examined here is the amount of time devoted to state and local politics (Table 6). The basic pattern of results is similar. In model 4, newspaper cross-ownership is positively associated with state and local political coverage, regardless of radio cross-ownership, but the differential effect is relatively large at 97 seconds and statistically significant (p<.10). However, the effects of newspaper cross-ownership are jointly significant at p<.01 in model 4; the average effect is 46 seconds, or 27% of the average state and local political coverage for non-cross-owned stations. The pooled effect of newspaper cross-ownership is slightly larger at 53 seconds and significant at p<.01 (see Table A3). For model 5 in Table 6, controlling for broadcast time and length, the newspaper cross-ownership effects are again positive and jointly significant (p<.05). The average effect of newspaper cross-ownership in model 5 is 40 seconds, while the pooled effect is 45 seconds and significant at p<.01 (see Table A3). Therefore, newspaper cross-ownership is associated with a 40-46 second average effect on state and local political coverage, or 24% to 27% more than the average for non-cross-owned stations.

Finally, while not the focus of this report, a casual inspection across Tables 3-6 reveals that the average effect of radio cross-ownership on local news coverage is consistently negative. It is not immediately obvious why radio cross-ownership should have such a different impact on

local news coverage compared to newspaper cross-ownership. Future research should examine the extent to which local political news content on a radio cross-owned television station substitutes for similar programming on the cross-owned radio station. The question to be pursued is whether radio cross-ownership facilitates a rationalization of program content across radio and television formats, or does indeed leads to less political coverage in total across radio and television formats.

5. Results: Political News Coverage

In order to further gauge the content of political news coverage on local television, I examine the total time devoted to i) state and local candidates' speaking for themselves, ii) total state and local candidate coverage, ii) partisan issue coverage, and iv) political opinion polls coverage. In this section, I do not analyze the partisan slant toward one party or another, although these same variables will be the basis for my analysis of slant in the next section. For now, I examine only the total time devoted to these types of stories, without concern about the balance of coverage.

In Table 7 present the mean time allocated to each of these four measures of political coverage; these mean values are similar across cross-owned and non-cross-owned stations, since none of the observed differences are statistically significant (p<10, or better). In the subsequent tables, I investigate whether there is a significant difference in any of these measures after controlling for ownership, network and broadcast characteristics.

First, total candidate speaking time is greater by as much as 10 seconds for cross-owned stations without radio stations, but the differential effect of radio and newspaper cross-ownership

¹⁶ Each of these dependent variables sometimes takes the value of zero for individual broadcasts. I have restimated all of the model specifications with a Tobit estimator; however, STATA does not support clustered standard errors with the Tobit command. Even so the pattern of results obtained by Tobit estimation is similar to that obtained with ordinary least squares and clustering. Therefore, for consistency with the rest of the analysis in this report, I simply present the ordinary least squares estimates for each of these limited dependent variables.

is consistently negative (Table 8). Even so, the average effect of newspaper cross-ownership is 6-7 seconds of additional candidate speaking time, or 25% of the average speaking time on non-cross-owned stations. However, in neither models 4 or 5 are the two newspaper cross-ownership variables either individually or jointly significant; the pooled effect of newspaper cross-ownership on speaking time is just under 6 seconds, but also not statistically significant (Table A4 in the appendix). So while newspaper cross-ownership is positively associated with state and local candidate speaking time and the magnitude of this effect is relatively large, the effect is simply not estimated precisely enough in this analysis to render it statistically significant.

In Table 9, I present the findings for total coverage of state and local candidates. Models 4 and 5 both yield positive and marginally significant effects of cross-ownership on non-radio-cross-owned stations, but the differential effect for radio and newspaper cross-ownership is negative, albeit not statistically significant. The average effect of newspaper cross-ownership is about 18 seconds more candidate coverage, or 25% more than the average amount of candidate coverage for non-cross-owned stations. However, the two newspaper cross-ownership variables are not jointly significant at conventional levels in either model 4 or model 5. In contrast, the pooled estimates are of a similar magnitude and are significant at p<.10 or better. Again, even though these estimates are not consistently significant, the magnitude of the positive association between newspaper cross-ownership and state and local candidate coverage is relatively large.

The next measure of political content is partisan issue coverage; the results presented in Table 10 also suggest a more negligible impact on this measure of political news coverage. The average effect of newspaper cross-ownership is negative 5-7 seconds, or 5%-8% less than for non-cross-owned stations. However, the two newspaper cross-ownership variables are jointly

significant at only p<.10 in model 4 and not jointly significant in model 5; further, the pooled effect of newspaper cross-ownership is also not statistically significant (Table A4).

In Table 11, I report the findings for the last measure of political news content, coverage of opinion polls. Neither the estimated effect of newspaper cross-ownership, nor the differential for radio and newspaper cross-ownership are significant in models 4 and 5. These variables are also not jointly significant in either specification; the pooled effect of cross-ownership is also not significant (Table A4). Even so, the average effect of newspaper cross-ownership on poll coverage is about 2 seconds, or about 33% of the average poll coverage for non-cross-owned stations. Consequently, for three of the four political news content measures, newspaper cross-ownership on average has a potentially substantively large positive effect on political news coverage, but these effects are not estimated precisely.

6. Results: Partisan Slant

I measure partisan slant by the difference across parties for the same measures employed above; that is the differences in: i) speaking time allowed to candidates of either party, ii) candidate coverage, iii) partisan issue coverage and iv) opinion polls favoring one party or the other. Descriptive statistics for each of these measures are listed in Table 12; from this table it would appear that both cross-owned and non-cross-owned stations allocate political coverage fairly evenly. On every measure though, the cross-owned stations exhibit a slight and statistically insignificant Republican-leaning slant. However, an important point to keep in mind when viewing these results is that there is no baseline for determining whether coverage is appropriately balanced or not.

For example, since the newsworthiness of different issues and events likely varies across markets (i.e., Mark Foley may be a more important story in Florida, compared to elsewhere), it

does not follow that any of these measures take the value of zero when news coverage is balanced. Instead, no inferences about balance should be made based upon the absolute value of any of these measures; only relative differences in these measures have meaning. That is, the regression estimates that follow can identify whether a cross-owned station provides more Democratic or Republican leaning coverage compared to stations in the same market, but these estimates are *uninformative* about whether any particular station's coverage is balanced or biased.

Regression analysis of the determinants of the difference in candidate speaking time reveals that newspaper cross-ownership is not significantly associated with this particular measure of slant, nor is radio cross-ownership (see Table 13). The average effect of newspaper cross-ownership on the difference in candidate speaking times is 4-5 seconds in favor of Republicans (i.e., negative 4-5 seconds), which is 16% to 20% more than the average total speaking time for Republican state and local candidates for non-cross-owned stations. However, the two variables for newspaper cross-ownership are not jointly significant in either model 4 or 5, nor are the pooled effects for cross-ownership statistically significant (Table A5).

The partisan differences in candidate coverage are reported in Table 14; as above, I focus on the results for specifications 4 and 5. In either case, for non-radio cross-owned stations, newspaper cross-ownership is associated with about 10 seconds more coverage of Republican state and local candidates (p<.10); however, the differential effect for radio and newspaper cross-ownership is positive, albeit not significant. The average effect of newspaper cross-ownership is about 8 seconds more coverage of Republican candidates, or about 11% of the average coverage for all candidates by non-cross-owned stations. However, again, the two variables that describe

the effects of newspaper cross-ownership are not jointly significant, nor is the common pooled effect of newspaper cross-ownership statistically significant (Table A5).

Differences in partisan issue coverage show the reverse pattern (Table 15). In both models 4 and 5, the effect of newspaper cross-ownership is insignificant and negative (i.e., Republican leaning) for non-radio cross-owned stations, but the differential for radio and newspaper cross-ownership is positive (i.e., leaning Democrat) and marginally significant. The average effect of newspaper cross-ownership is two seconds more coverage of issues that are favorable to Democrats; however, this difference represents just 2% of the average of all partisan coverage for non-cross-owned stations. Further, the newspaper cross-ownership variables are only marginally significant for model 4 (p<.10), while the pooled effect of newspaper cross-ownership is small, negative and statistically insignificant (Table A5).

The final measure of partisan slant is the difference in poll coverage (Table 16). The average effect of newspaper cross-ownership is negative 1.5 seconds (i.e., leans Republican); while small, this difference represents 25% of all poll coverage for non-cross-owned stations. However, once again, the estimates for newspaper cross-ownership and the differential for radio and newspaper cross-ownership are not individually or jointly significant in models 4 or 5. Further, neither are the estimated pooled effects of cross-ownership on differences in poll coverage (Table A5). Consequently, while newspaper cross-ownership is sometimes associated with more coverage of Republican candidates, it is not consistently and significantly related to these measures of political slant.

7. Results: A Further Exploration of Partisan Slant

Up to this point, I have assumed that cross-ownership has a uniform effect on partisan slant, regardless of the particular cross-owned station. However, it is possible that cross-owned

stations exhibit more slant overall, just in different directions depending on the partisan leaning of each television station and newspaper pair. One approach for classifying the editorial leaning of newspapers is by the political endorsements of candidates in Presidential elections (Snyder et al., 2006). In order to check whether the editorial slant of the cross-owned newspaper influences local television news coverage, I constructed an indicator that takes the value of 1 if John Kerry was endorsed by the cross-owned newspaper in the 2004 presidential election, -1 if Bush was endorsed, and zero otherwise.¹⁷ The results are reported in Table 17, although for ease of exposition, I only present the estimates of interest for the full models (4 and 5) described above. While an endorsement for Kerry (Bush) is positively associated with Democratic (Republican) slant for three of the four slant measures, this effect is just marginally significant for only the difference in state and local candidate speaking time. Even so, this 6 second differential in the direction of the endorsed candidate's party is about 25% of the average state and local candidate speaking time for non-cross-owned stations.

Next, I examine whether differences in campaign contributions tied to the corporate ownership of each television station have any effect on partisan slant. As shown in Table 18, the difference in contributions made to Democrats versus Republicans is unrelated to the political slant of political news coverage. However, the interaction of cross-ownership with the campaign contribution variable is positively associated with differences in candidate coverage. This estimate suggests that the relative coverage of candidates in either party increases by about 5 seconds per \$100,000 in net campaign contributions (in the direction of the party receiving the contributions); or about 8% of the average of total candidate coverage for non-cross-owned stations. Even so, this effect does not approach statistical significance for the other three measures of political slant.

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¹⁷ Among cross-owned newspapers, there were 16 such endorsements (5 for Kerry and 11 for Bush).

Overall, the results presented to this point suggest that newspaper cross-ownership is not consistently and significantly related to partisan slant in local television news, although for some measures there is a Republican slant relative to the news coverage of other stations in the same market. To reiterate, these associations, even if consistently and precisely estimated, do not tell us whether stations cover political news unfairly or fairly; instead, these differences in slant can only inform us about whether cross-owned stations have a similar slant as their major within market competitors.

Nevertheless, I provide one last set of estimates that are suggestive of what might be an important determinant of slant. In Table 19, I report regression estimates for models without market fixed effects; instead, I control for John Kerry's vote percentage in the 2004 presidential election for each station's DMA. For all but speaking time, there appears to be a significant positive association between Democratic voting preferences in the local electorate (i.e., a higher voter percentage for Kerry) and Democratic slant in every measure of slant. Consider, a change in the vote percentage for Kerry of 20%; this would be associated with favorable changes for Democrats in candidate speaking time (2 seconds), candidate coverage (14 seconds), partisan issue coverage (18 seconds) and poll coverage (6 seconds). Further, these differences are statistically significant in several specifications. Therefore, this final set of results suggests that partisan slant in local television news coverage is determined at least in part by market forces, rather than newspaper cross-ownership.

8. Discussion

This report describes the construction and analysis of a novel dataset on local television news coverage from the week prior to the 2006 general elections. I then compare the late evening newscasts of every cross-owned television station in the U.S. to those of available major

network-affiliated competitors in the same market. By virtue of both the comprehensiveness of the data examined and the within-market analysis employed, this report is a significant advance over existing studies of the effect of cross-ownership on either localism or partisan slant.

The within-market comparison reveals that cross-owned newspaper\television combinations devote more time to news, as well as several categories of local news. In particular, cross-owned stations contain on average about 1-2 minutes more news coverage overall, or 4%-8% more than the average for non-cross-owned stations; cross-owned stations show 7%-10% more local news than do non-cross-owned stations (regardless of whether sports and weather segments are included in this comparison). Further, on average, cross-owned stations also broadcast 24%-27% more coverage of state and local politics and provide about 25% more candidate coverage, candidate speaking time and poll coverage (although the latter effects are not precisely estimated).

In contrast, there is little consistent and significant difference in the partisan slant of cross-owned stations and other major network-affiliated stations in the same market. In addition, the particular political orientation of cross-owned stations, as measured by the editorial endorsements of the affiliated newspaper or the campaign contributions flowing from persons associated with the parent company, are also not significantly related to political slant in most specifications. However, there is some evidence that the partisan slant of local news in each market is associated with the average partisan voting preferences in the local market.

These findings are consistent with the claim that market forces shape the political slant of local news coverage as indicated by Gentzkow and Shapiro's recent analysis of local newspapers. However, the fact that the political slant in news coverage is somewhat responsive to the political preferences of the potential audience does not imply that the overall slant is

perfectly calibrated to the market. Therefore an important caveat to keep in mind is that the analysis reported here cannot determine whether local television stations (cross-owned or not) present news in a balanced or biased manner.

For this reason, it is also not apparent that partisan slant that differs from other stations in the same market is undesirable from a social perspective. For example, recent research indicates that there is a pronounced leftward slant in the news content of several of the most prominent national news media outlets (Groseclose and Milyo 2005; Milyo and Groseclose 2006); if this is also the case at the local level, then the presence of one station with partisan slant in the opposite direction may be desirable from the perspective of increasing the diversity of perspectives reflected in news content. This also suggests that to the extent that market characteristics determine political slant in news content, additional voices in a market may not imply greater diversity of the content that is broadcast in that market.

As a final caveat, it is possible that cross-owned stations have some impact on their market as a whole. The empirical exercise conducted in this study identifies within-market effects, but not such market-wide effects. Consequently, this issue is left for future research.

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Table 1: Cross-Owned and Control Stations by Market

DMA Rank and Name	Cross-Owned	Non Cross-Owned	
1 New York, NY	WWOR, WYNY (New York Post) and WPIX (Newsday)	WABC, WCBS, WNBC	
2 Los Angeles, CA	KTLA (Los Angeles Times)	KABC, KCBS, KNBC, KTTV	
3 Chicago, IL	WGN (Chicago Tribune)	WBBM, WFLD, WLS	
6 Dallas, TX	WFAA (Dallas Morning News)	KDAF, KDFW, KTVT, KXAS	
9 Atlanta, GA	WSB (Atlanta Journal Constitution)	WAGA, WGSL, WXIA	
12 Tampa, FL	WFLA (Tampa Tribune)	WFTS, WTSP, WTVT	
13 Phoenix, AZ	KPNX (Arizona Republic)	KNXV, KPHO, KSAZ	
16 Miami, FL	WSFL (Sun Sentinel)	WFOR, WPLG, WSVN, WTVJ	
28 Hartford, CT	WTIC (Hartford Courant)	WFSB, WTNH, WVIT	
32 Columbus, OH	WBNS (Columbus Dispatch)	WCMH, WSYX, WTTE, WWHO	
33 Cincinnati, OH	WCPO (Cincinnati Post)	WKRC, WLWT, WXIX	
34 Milwaukee, WI	WTMJ (Milwaukee Journal Sentinel)	WDJT, WISN, WITI	
35 Salt Lake City, UT	KSL (Deseret News)	KSTU, KTVX, KUTV	
58 Dayton, OH	WHIO (Dayton Daily News)	WDTN WKEF, WRGT	
77 Spokane, WA	KHQ (Spokesman-Review)	KAYU, KREM, KXLY	
80 Paducah, KY	WPSD (Paducah Sun)	KFVS, WSIL	
88 South Bend, IN	WSBT (South Bend Tribune)	WNDU, WSJV	
89 Cedar Rapids, IA	KCRG (Cedar Rapids Gazette)	KFXA, KGAN, KWWL	
92 Tri-Cities, TN-VA	WJHL (Bristol Herald Courier)	WCYB, WEMT, WKPT	
93 Baton Rouge, LA	WBRZ (Morning Advocate)	WAFB	
95 Waco-Temple-Bryan, TX	KCEN (Temple Daily Telegram & Killeen Herald)	KWTX, KXXV	
103 Youngstown, OH	WFMJ (Vindicator)	WKBN, WYFX, WYTV	
105 Myrtle Beach-Florence, SC	WBTW (Morning News)	WFXB, WPDE	
119 Fargo, ND	WDAY (Forum)	KVLY, KVRR, KXJB	
128 Columbus, GA	WRBL (Opelika-Auburn News)	WTVM, WXTX	
156 Panama City, FL	WMBB (Jackson County Floridian)	WJHG, WTVY	
171 Quincy, IL	WGEM (Quincy-Herald Whig)	KHQA	

Source: Federal Communications Commission.

Table 2: Content of News Coverage by Cross-Ownership (in seconds)

	Cross-Owned Station Broadcasts (n=87)	Non-Cross-Owned Station Broadcasts (n=225)	Difference in Means
Total news	1557.5 (466.7)	1536.1 (452.8)	+21.4
Local news (includes sports and weather)	1268.5 (322.7)	1227.3 (353.9)	+41.1
Local news (excludes sports and weather)	726.0 (343.1)	707.4 (304.7)	+18.6
State and local politics	184.5 (171.6)	169.8 (167.1)	+14.7

Notes: Mean and standard deviation. Difference in means is (cross-owned less non-cross-owned); ***p<.01, **p<.05, and *p<.10.

Table 3: Total News Coverage (in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)			
Local station ownership								
Cross-owned newspaper	35.1 (0.41)	87.0 (0.77)	29.5 (0.32)	99.1 (1.56)	65.7** (2.19)			
Cross-owned radio station		-432.3*** (2.70)	-361.8** (2.27)	-172.1* (1.87)	-41.8 (1.11)			
Cross-owned radio and newspaper		150.6 (0.67)	233.4 (1.18)	117.4 (0.86)	-37.6 (0.66)			
Parent company coverage of all television households (%)			22.0*** (2.81)	12.8** (2.36)	-2.9 (1.05)			
Network owned and operated			-332.6* (1.84)	-281.3** (2.13)	37.7 (0.60)			
Network affiliation (omitted category is CW\MyNetwork)								
ABC				-244.5 (1.34)	-33.2 (0.29)			
CBS				-350.6* (1.95)	-52.6 (0.47)			
FOX				411.1** (2.18)	72.4 (1.30)			
NBC				-351.3* (1.90)	-49.3 (0.43)			
Other control variables								
Time and length of broadcast fixed effects	No	No	No	No	Yes			
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes			
Adjusted R-squared	.10	.17	.24	.65	.86			

Notes: Absolute values of t-statistics in parentheses (using heteroscedastic-consistent standard errors corrected for clustering by television station); ***p<.01, **p<.05 and *p<.10.

Table 4: Local News Coverage Including Sports and Weather (in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	46.9 (0.91)	77.2 (1.13)	50.5 (0.89)	91.6 (1.63)	78.8** (1.98)
Cross-owned radio station		-307.8** (2.56)	-255.0** (2.16)	-167.1* (1.89)	-76.5 (1.20)
Cross-owned radio and newspaper		124.2 (0.80)	190.1 (1.38)	143.4 (1.23)	23.0 (0.26)
Parent company coverage of all television households (%)			17.3*** (3.70)	14.4*** (3.28)	3.4 (1.02)
Network owned and operated			-185.5* (1.70)	-231.4* (1.94)	-17.0 (0.18)
Network affiliation (omitted cat	egory is CV	V\MyNetwork,)		
ABC				-16.3 (0.12)	324.1*** (3.35)
CBS				-74.3 (0.56)	331.6*** (3.47)
FOX				333.0** (2.37)	106.6 (1.28)
NBC				-79.6 (0.60)	327.4*** (3.36)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.16	.23	.31	.51	.67

Table 5: Local News Coverage Excluding Sports and Weather (in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	25.7 (0.65)	8.4 (0.15)	-10.2 (0.20)	25.0 (0.59)	12.6 (0.38)
Cross-owned radio station		-301.4*** (2.88)	-264.8** (2.64)	-213.0*** (3.01)	-170.6*** (2.77)
Cross-owned radio and newspaper		239.6* (1.73)	285.2** (2.29)	258.3** (2.57)	210.2** (2.30)
Parent company coverage of all television households (%)			12.0*** (3.39)	10.4*** (3.40)	5.3* (1.87)
Network owned and operated			-129.1 (1.52)	-175.0* (1.89)	-68.4 (0.83)
Network affiliation (omitted car	egory is C	W\MyNetwork))		
ABC				33.6 (0.34)	276.4*** (3.51)
CBS				-42.0 (0.43)	234.3*** (2.94)
FOX				276.0** (2.54)	157.4* (1.94)
NBC				-52.7** (0.51)	225.8*** (2.74)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.35	.41	.46	.60	.66

Table 6: State and Local Politics Coverage (in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	20.5 (1.11)	19.2 (0.81)	14.5 (0.68)	26.3 (1.29)	24.9 (1.30)
Cross-owned radio station		-126.2** (2.38)	-112.8** (2.18)	-96.2** (2.35)	-79.6** (2.03)
Cross-owned radio and newspaper		85.4 (1.32)	102.7* (1.74)	96.7* (1.87)	73.3 (1.48)
Parent company coverage of all television households (%)			4.5** (2.60)	4.6*** (2.74)	2.6 (1.47)
Network owned and operated			-39.0 (0.81)	-72.5 (1.50)	-34.8 (0.71)
Network affiliation (omitted cat	egory is CV	<i>W</i> \ <i>MyNetwork</i>)		
ABC				39.7 (0.93)	19.0 (0.36)
CBS				-5.9 (0.14)	-17.2 (0.33)
FOX				119.0** (2.48)	81.8* (1.70)
NBC				0.3 (0.01)	-11.2 (0.20)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.25	.29	.31	.38	.39

Table 7: Political News Coverage by Cross-Ownership (in seconds)

	Cross-Owned Station Broadcasts (n=87)	Non Cross-Owned Station Broadcasts (n=225)	Difference in Means
Speaking time of state and	l local candidates		
Total speaking	24.4 (37.3)	24.3 (34.1)	+0.1
State and local candidate	coverage		
Total candidate	76.5 (101.0)	69.8 (80.2)	+6.7
Partisan issue coverage			
Total partisan issues	89.9 (85.4)	92.0 (93.2)	-2.1
Opinion poll coverage			
Total polls	9.7 (24.3)	6.3 (16.9)	+3.4

Notes: Mean and standard deviation. Difference in means is (cross-owned less non-cross-owned); ***p<.01, **p<.05, and *p<.10.

Table 8: Total State and Local Candidate Speaking Time (in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	0.4 (0.10)	6.6 (1.11)	7.8 (1.20)	8.0 (1.28)	9.6 (1.52)
Cross-owned radio station		-14.4** (2.36)	-13.9** (2.22)	-5.6 (1.06)	-3.2 (0.62)
Cross-owned radio and newspaper		-6.2 (0.58)	-5.2 (0.48)	-8.3 (0.82)	-13.9 (1.34)
Parent company coverage of all television households (%)			0.2 (0.78)	0.3 (0.73)	-0.0 (0.11)
Network owned and operated			3.8 (0.47)	-4.8 (0.58)	-0.8 (0.09)
Network affiliation (omitted cat	egory is CV	V\MyNetwork _,)		
ABC				-0.8 (0.14)	3.8 (0.43)
CBS				-1.5 (0.27)	4.5 (0.45)
FOX				20.4*** (3.92)	17.5** (2.57)
NBC				5.6 (0.96)	11.2 (1.12)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.10	.13	.13	.17	.17

Table 9: Total State and Local Candidate Coverage (in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	7.8 (0.87)	16.8 (1.50)	16.6 (1.48)	18.6 (1.62)	21.8* (1.87)
Cross-owned radio station		-37.6** (2.15)	-34.3* (1.92)	-15.4 (1.12)	-7.2 (0.58)
Cross-owned radio and newspaper		1.9 (0.07)	6.4 (0.25)	-0.9 (0.04)	-16.3 (0.80)
Parent company coverage of all television households (%)			1.2 (1.47)	1.2* (1.90)	0.2 (0.31)
Network owned and operated			-5.7 (0.27)	-25.4 (1.50)	-9.3 (0.57)
Network affiliation (omitted cat	egory is CV	V\MyNetwork))		
ABC				2.1 (0.13)	6.4 (0.32)
CBS				-9.5 (0.59)	-0.5 (0.02)
FOX				54.1*** (3.56)	40.0** (2.44)
NBC				6.6 (0.43)	15.0 (0.71)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.25	.27	.27	.33	.34

Table 10: Total Partisan Issue Coverage (in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	-1.0 (0.10)	-7.6 (0.54)	-20.3 (1.34)	-14.3 (0.94)	-13.7 (1.01)
Cross-owned radio station		-33.1* (1.87)	-23.1 (1.35)	-21.3 (1.38)	-12.0 (0.75)
Cross-owned radio and newspaper		38.3 (1.36)	49.0** (2.00)	47.0** (2.26)	32.1 (1.61)
Parent company coverage of all television households (%)			2.9*** (2.66)	2.7*** (3.04)	1.5* (1.83)
Network owned and operated			-64.5 (1.90)	-62.9** (2.28)	-42.9* (1.78)
Network affiliation (omitted cat	egory is CW	∖MyNetwork _,)		
ABC				7.6 (0.21)	10.6 (0.39)
CBS				-20.9 (0.58)	-12.3 (0.45)
FOX				27.9 (0.75)	8.7 (0.27)
NBC				-23.7 (0.70)	-15.5 (0.57)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.19	.20	.22	.26	.27

Table 11: Total State and Local Poll Coverage (in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	3.3 (1.41)	2.3 (0.57)	0.1 (0.04)	0.4 (0.13)	-0.5 (0.17)
Cross-owned radio station		-10.9 (1.63)	-9.6 (1.44)	-10.7 (1.44)	-11.0 (1.44)
Cross-owned radio and newspaper		9.7 (1.10)	10.9 (1.30)	11.5 (1.39)	13.1 (1.58)
Parent company coverage of all television households (%)			0.3 (1.55)	0.4 (1.50)	0.4 (1.55)
Network owned and operated			-10.2* (1.83)	-9.9 (1.28)	-9.7 (1.30)
Network affiliation (omitted cat	egory is CW	V\MyNetwork,)		
ABC				3.3 (0.51)	-7.1 (0.96)
CBS				-4.5 (0.87)	-15.3** (2.07)
FOX				0.2 (0.03)	-0.4 (0.06)
NBC				-3.3 (0.57)	-13.9* (1.75)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.09	.11	.11	.12	.13

Table 12: Slant of News Coverage by Cross-Ownership (in seconds)

	Cross-Owned Station Broadcasts (n=87)	Non Cross-Owned Station Broadcasts (n=225)	Difference in Means
Speaking time of state and	local candidates		
Difference (Dem Rep.)	-2.2 (27.4)	0.7 (14.9)	-3.0
State and local candidate c	overage		
Difference (DemRep.)	0.2 (38.0)	1.8 (40.7)	-1.6
Partisan issue coverage			
Difference (DemRep.)	-6.5 (92.8)	-3.0 (77.0)	-3.5
Opinion poll coverage			
Difference (Dem. – Rep.)	0.0 (14.8)	2.5 (16.1)	-2.5

Notes: Mean and standard deviation. Difference in means is (cross-owned less non-cross-owned); ***p<.01, **p<.05, and *p<.10.

Table 13: Difference in Speaking Time (Democratic coverage less Republican coverage, in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	-3.0 (1.14)	-4.4 (1.16)	-5.8 (1.28)	-5.2 (1.24)	-5.4 (1.29)
Cross-owned radio station		1.2 (0.32)	1.8 (0.49)	4.1 (1.13)	2.4 (0.59)
Cross-owned radio and newspaper		2.9 (0.55)	3.5 (0.61)	2.3 (0.40)	5.1 (0.80)
Parent company coverage of all television households (%)			0.2 (0.84)	0.1 (0.38)	0.3 (1.23)
Network owned and operated			-6.2 (1.19)	-6.9 (1.25)	-10.5* (1.77)
Network affiliation (omitted cat	egory is CW	V\MyNetwork _,)		
ABC				-2.1 (0.61)	-4.5 (0.83)
CBS				-0.7 (0.21)	-4.2 (0.68)
FOX				5.8 (1.63)	9.2** (2.33)
NBC				-1.0 (0.30)	-4.3 (0.70)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.02	.01	.01	.02	.02

Table 14: Difference in Candidate Coverage (Democratic coverage less Republican coverage, in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	-2.9 (0.60)	-6.7 (1.18)	-9.0 (1.53)	-9.8* (1.71)	-10.4* (1.81)
Cross-owned radio station		2.6 (0.27)	2.9 (0.30)	10.3 (1.08)	7.8 (0.81)
Cross-owned radio and newspaper		7.9 (0.61)	7.8 (0.61)	5.8 (0.48)	10.3 (0.85)
Parent company coverage of all television households (%)			-0.0 (0.00)	0.2 (0.41)	0.5 (1.18)
Network owned and operated			-9.4 (0.98)	-23.1** (1.99)	-28.3** (2.45)
Network affiliation (omitted cat	egory is CW	∖MyNetwork _,)		
ABC				4.3 (0.39)	-5.9 (0.39)
CBS				10.3 (1.02)	-1.6 (0.11)
FOX				22.1* (1.83)	27.0** (2.28)
NBC				17.8* (1.72)	6.0 (0.41)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.04	.04	.04	.05	.05

Table 15: Difference in Partisan Issue Coverage (Democratic coverage less Republican coverage, in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	-2.9 (0.33)	-17.9 (1.49)	-9.3 (0.77)	-6.2 (0.53)	-6.6 (0.56)
Cross-owned radio station		-10.3 (0.86)	-17.0 (1.34)	-27.1* (1.87)	-27.0* (1.89)
Cross-owned radio and newspaper		44.5* (1.91)	37.4* (1.71)	41.8* (1.96)	42.2* (1.90)
Parent company coverage of all television households (%)			-1.9*** (3.05)	-1.9** (2.38)	-1.9** (2.25)
Network owned and operated			43.9*** (2.83)	44.1** (2.00)	44.4** (1.92)
Network affiliation (omitted cat	egory is CW	∖MyNetwork	·)		
ABC				16.3 (0.82)	-4.4 (0.15)
CBS				19.6 (1.12)	-1.5 (0.05)
FOX				5.6 (0.30)	5.5 (0.28)
NBC				4.1 (0.21)	-17.0 (0.55)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.28	.28	.29	.29	.28

Table 16: Difference in Poll Coverage (Democratic coverage less Republican coverage, in seconds)

Independent variables	(1)	(2)	(3)	(4)	(5)
Local station ownership					
Cross-owned newspaper	-3.4* (1.88)	-4.2 (1.33)	-3.8 (1.33)	-3.3 (1.24)	-3.0 (1.11)
Cross-owned radio station		-5.3 (0.84)	-5.6 (0.88)	-9.4 (1.35)	-9.6 (1.36)
Cross-owned radio and newspaper		5.5 (0.72)	5.2 (0.69)	6.9 (0.92)	6.7 (0.87)
Parent company coverage of all television households (%)			-0.1 (0.51)	-0.0 (0.09)	0.0 (0.03)
Network owned and operated			1.9 (0.40)	3.5 (0.80)	2.9 (0.65)
Network affiliation (omitted cat	egory is CW	V\MyNetwork _,)		
ABC				5.1 (0.91)	2.3 (0.25)
CBS				-0.2 (0.05)	-3.2 (0.36)
FOX				-3.3 (0.68)	-2.4 (0.46)
NBC				-2.4 (0.49)	-5.5 (0.59)
Other control variables					
Time and length of broadcast fixed effects	No	No	No	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.05	.05	.05	.07	.06

Table 17: Editorial Endorsements and Political Slant of Cross-owned Stations

Independent variables	Difference in Speakin			ence in Coverage		in Partisan overage		ence in overage
Cross-owned newspaper	-3.3 (0.98)	-3.8 (1.08)	-8.3 (1.54)	-9.2* (1.68)	-10.8 (0.91)	-11.2 (0.93)	-3.1 (1.15)	-2.9 (1.05)
Cross-owned radio	3.4 (0.99)	1.9 (0.51)	9.8 (1.01)	7.5 (0.77)	-25.4* (1.74)	-25.8* (1.80)	-9.5 (1.36)	-9.6 (1.35)
Cross-owned radio and newspaper	2.5 (0.47)	5.1 (0.86)	6.0 (0.51)	10.4 (0.87)	41.2* (1.95)	42.1* (1.94)	6.9 (0.93)	6.7 (0.87)
Endorsement in 2004 (1=Kerry, Bush=-1)	6.3* (1.90)	5.5* (1.77)	5.1 (0.83)	4.0 (0.65)	-15.7 (1.66)	-16.1 (1.64)	0.7 (0.43)	0.4 (0.24)
Other control variables								
Ownership and network controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time and length of broadcast fixed effects	No	Yes	No	Yes	No	Yes	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.03	.03	.05	.05	.29	.28	.06	.05

Notes: Ordinary least squares coefficient estimates using the "full model" specification (models 4 and 5, see above); absolute values of t-statistics in parentheses (using heteroscedastic-consistent standard errors corrected for clustering by television station). ***p<.01, **p<.05, and *p<.10.

Table 18: Campaign Contributions and Political Slant of Cross-owned Stations

Independent variables		in Candidate ng Time		erence in te Coverage		e in Partisan Coverage		ence in overage
Cross-owned newspaper	-5.1 (1.13)	-5.3 (1.20)	-12.0* (1.92)	-12.4** (2.01)	-9.5 (0.79)	-9.6 (0.79)	-3.2 (1.19)	-2.9 (1.10)
Cross-owned radio	4.1 (1.07)	2.6 (0.61)	12.9 (1.27)	10.5 (1.04)	-25.1* (1.76)	-24.8* (1.76)	-9.8 (1.36)	-9.7 (1.34)
Cross-owned radio and newspaper	2.1 (0.38)	4.6 (0.75)	3.7 (0.30)	7.7 (0.61)	42.4* (1.98)	42.0* (1.89)	7.4 (0.95)	7.0 (0.89)
Differences in contributions (Dem-Rep; \$100K)	0.2 (0.29)	0.6 (0.84)	1.5 (0.66)	2.3 (0.95)	-2.3 (0.77)	-2.2 (0.73)	-0.5 (0.61)	-0.4 (0.54)
(Cross-owned newspaper) X (Differences in contributions)	-0.0 (0.00)	0.1 (0.06)	5.4** (2.00)	5.5** (2.43)	7.5 (1.25)	7.5 (1.26)	-0.4 (0.20)	-0.2 (0.07)
Other control variables								
Ownership and network controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time and length of broadcast fixed effects	No	Yes	No	Yes	No	Yes	No	Yes
DMA and date fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.01	.01	.05	.05	.29	.28	.06	.05

Notes: Ordinary least squares coefficient estimates using the "full model" specification (models 4 and 5, see above); absolute values of t-statistics in parentheses (using heteroscedastic-consistent standard errors corrected for clustering by television station). ***p<.01, **p<.05, and *p<.10.

Table 19: DMA Political Preferences and Slant of Cross-Owned Stations

		in Candidate ng Time		rence in e Coverage		e in Partisan Coverage		ence in overage
Kerry vote percentage in DMA	0.1 (1.45)	0.1 (1.06)	0.7*** (2.79)	0.7** (2.38)	0.9* (1.72)	0.7 (1.30)	0.3* (1.80)	0.3* (1.93)
Cross-owned newspaper	-3.6 (0.77)	-3.9 (0.77)	-3.8 (0.52)	-4.4 (0.58)	-9.5 (0.80)	-12.0 (0.97)	-1.7 (0.83)	-1.3 (0.68)
Cross-owned radio	0.4 (0.15)	0.0 (0.01)	10.0 (1.39)	10.0 (1.37)	-19.3 (1.03)	-20.0 (1.07)	-3.7 (0.85)	-3.4 (0.80)
Cross-owned radio and newspaper	2.7 (0.42)	4.2 (0.61)	-1.0 (0.09)	0.6 (0.06)	36.0 (1.49)	39.6* (1.73)	0.5 (0.11)	-0.6 (0.15)
Other control variables								
Ownership and network controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time and length of broadcast fixed effects	No	Yes	No	Yes	No	Yes	No	Yes
Date fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	.00	.00	.01	.00	.16	.16	.03	.03

Notes: Ordinary least squares coefficient estimates using the "full model" specification (models 4 and 5, see above); absolute values of t-statistics in parentheses (using heteroscedastic-consistent standard errors corrected for clustering by television station). ***p<.01, **p<.05, and *p<.10.

Table A1: Partisan Issues

Democratic Issues	Republican Issues
Bush's low approval rating	Economy
Costs of immigration reform	Endorsements
Crist avoids Bush in Florida	Ethics charges against Democrats
Endorsements	Gay marriage
Ethics charges against Republicans	John Kerry's "botched joke"
Iraq audit\deaths	Liberal Democratic leaders
Mark Foley page scandal	Low unemployment
Minimum wage	Negative advertisements by Democrats
Negative advertisements by Republicans	Tax cuts
Rumsfeld resignation?	Vote fraud
Stem cell research	
Vote suppression\voter intimidation	

Note: Partisan issues were selected by examining party and candidate websites in the week before the general election.

Table A2: Station Characteristics by Cross-Ownership Status

	Cross-Owned Station Broadcasts (n=87)	Non-Cross-Owned Station Broadcasts (n=225)
Cross-owned radio	.38 (.49)	.13 (.34)
Parent company coverage of all television households (%)	11.3 (12.1)	15.1 (14.0)
Network owned and operated	.07 (.25)	.31 (.46)
ABC	.24 (.43)	.23 (.42)
CBS	.21 (.41)	.28 (.45)
CW\MyNetwork	.17 (.38)	.03 (.16)
FOX	.07 (.25)	.27 (.44)
NBC	.31 (.47)	.20 (.40)
One hour time slot	.21 (.41)	.21 (.41)
9PM broadcast	.03 (.18)	.11 (.31)
10PM broadcast	.59 (.50)	.50 (.50)
11PM broadcast	.38 (.49)	.39 (.49)

Notes: Variable mean with standard deviation in parentheses.

Table A3: Pooled Cross-Ownership and Local News Coverage (in seconds)

Dependent variable	Estimated coefficient on cross-ownership (absolute value of t-statistic)			
	(4)	(5)		
Total news	131.7** (2.61)	55.4** (2.29)		
Local news (includes sports and weather)	131.4*** (2.93)	85.1** (2.57)		
Local news (excludes sports and weather)	96.6*** (2.85)	70.3** (2.58)		
State and local politics	53.1*** (3.08)	45.0*** (2.67)		

Notes: Each cell entry is associated with a different regression estimate. The cell entries are the estimated regression coefficient on newspaper cross-ownership from specifications (4) and (5) in Tables 2-6, after omitting the differential indicator for "cross-owned radio and newspaper." ***p<.01, **p<.05, and *p<.10.

Table A4: Pooled Cross-Ownership and Political News Coverage (in seconds)

Dependent variable	Estimated coefficient on cross-ownership (absolute value of t-statistic)				
	(4)	(5)			
Candidate speaking time	5.7 (1.18)	5.8 (1.22)			
Candidate coverage	18.3** (2.10)	16.5* (1.85)			
Partisan issue coverage	-1.3 (0.10)	-4.9 (0.40)			
Poll coverage	3.6 (1.41)	3.0 (1.18)			

Notes: Each cell entry is associated with a different regression estimate. The cell entries are the estimated regression coefficient on newspaper cross-ownership from specifications (4) and (5) in Tables 8-11, after omitting the differential indicator for "cross-owned radio and newspaper." ***p<.01, **p<.05, and *p<.10.

Table A5: Pooled Cross-Ownership and Political Slant (in seconds)

Dependent variable	Estimated coefficient on cross-ownership (absolute value of t-statistic)			
	(4)	(5)		
Difference in candidate speaking time	-4.5 (1.35)	-4.0 (1.22)		
Difference in candidate coverage	-8.2 (1.60)	-7.6 (1.47)		
Difference in partisan issue coverage	5.4 (0.60)	5.0 (0.54)		
Difference in poll coverage	-1.4 (0.71)	-1.1 (0.58)		

Notes: Each cell entry is associated with a different regression estimate. The cell entries are the estimated regression coefficient on newspaper cross-ownership from specifications (4) and (5) in Tables 13-16, after omitting the differential indicator for "cross-owned radio and newspaper." ***p<.01, **p<.05, and *p<.10.